

NIOSH TESTS SELF-RESCUERS

NIOSH recently assessed the performance of four second-generation oxygen self-rescuers used in the United States, an agency publication reported.

Mine operators and manufacturers can use the results of the study to compare units.

Three of the self-rescuers had a rated duration of 60 minutes: the *CSE SR-100*, *Draeger OXY K Plus*, and *MSA Portal-Pack*. They are marketed as direct replacements for their predecessors (the *AU-9A1*, *OXY-SR 60B*, and *60-minute SCSR* respectively).

“We also tested the 10-minute-rated *Ocenco M-20*,” which is meant to be used with the 60-minute-rated *Ocenco EBA 6.5*, the report notes. “It is designed to be worn on the belt, replacing a similarly sized filter self-rescuer.” Although most of the units are meant to be worn on the belt there has been some resistance among miners, although the units are smaller than the old ones, NIOSH notes.

The self-rescuers were tested on a breathing and metabolic simulator, monitoring inhaled levels of carbon dioxide and oxygen.

In summary, the Draeger OXY K Plus and the MSA Portal-Pack had the highest quantities of usable oxygen. The Draeger had the highest oxygen levels and the lowest inhaled carbon dioxide levels. It also had the lowest breathing resistance. The MSA generated the lowest temperatures.

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